

WHAT IS CLAIMED IS:

1 1. A method for seeding a random number generator, the
2 method comprising the steps of:

3 (a) retrieving a first data block from a memory;

4 (b) initially seeding the random number generator using said
5 first data block as a seed;

6 (c) retrieving a number generated by the random number
7 generator;

8 (d) mapping said number to a memory address in said
9 memory using a mathematical function;

10 (e) retrieving a successive data block from said memory
11 address; and

12 (f) successively seeding the random number generator with a
13 combination of said seed and said successive data block such that said
14 combination of said seed and said successive data block becomes a resulting
15 seed.

1 2. The method recited in claim 1, further comprising the
2 further step of:

3 (e') after each performance of (e), testing for satisfaction of at
4 least one criterion and if said at least one criterion is not satisfied, repeating (c),

5 (d), (e), and (e').

1 3. The method recited in claim 2, wherein a criterion of said
2 at least one criterion is an absence of a string of identical bits in said successive
3 data block longer than a specified number of bits.

1 4. The method recited in claim 3, wherein said specified
2 number is equal to the number of bits in said successive data block.

1 5. The method recited in claim 2, further comprising the
2 further step of:

3 (e'') after each performance of (e'), checking the number of
4 repetitions of (c), (d), (e), and (e') due to failure to satisfy said at least one
5 criterion and stopping said repetitions when a specified number of said
6 repetitions have been performed.

1 6. The method recited in claim 5, wherein said specified
2 number of said repetitions is two.

1 7. The method recited in claim 1, wherein said first data
2 block includes an identifier unique to a specified computer device.

1 8. The method recited in claim 1, wherein said first data
2 block includes previously saved data.

1 9. The method of claim 1, wherein said mathematical
2 function used in said mapping is:

3 $f(x) = x \pmod{m} + b$ for $x < b$;

4 $f(x) = x$ for $b \leq x \leq b + m$; and

5 $f(x) = x \pmod{m} + b$ for $x > b + m$;

6 wherein $f(x)$ = said memory address to which said generated
7 number is mapped;

8 x = retrieved number generated by random number generator;

9 b = base memory address; and

10 m = memory size.

1 10. The method recited in claim 1, wherein said combination
2 of said seed and said successive data block is accomplished by hashing said
3 seed and said successive data block.

1 11. An apparatus for seeding a random number generator, the
2 apparatus comprising:

3 a memory; and

4 a processor operatively coupled to said memory, wherein said
5 processor is programmed to:

6 (a) retrieve a first data block from said memory;

7 (b) initially seed the random number generator using
8 said first data block as a seed;

9 (c) retrieve a number generated by the random number
10 generator;

11 (d) map said number to a memory address in said
12 memory using a mathematical function;

13 (e) retrieve a successive data block from said memory
14 address; and

15 (f) successively seed the random number generator
16 with a combination of said seed and said successive
17 data block such that said combination of said seed
18 and said successive data block becomes a resulting
19 seed.

1 12. The apparatus recited in claim 11, wherein said processor
2 is further programmed to:

3 (e') after each performance of (e), test for satisfaction of at

4 least one criterion and if said at least one criterion is not satisfied, repeat (c),
5 (d), (e), and (e').

1 13. The apparatus recited in claim 12, wherein said processor
2 is further programmed to:

3 (e'') after each performance of (e'), check the number of
4 repetitions of (c), (d), (e), and (e') due to failure to satisfy said at least one
5 criterion and stop said repetitions when a specified number of said repetitions
6 have been performed.

1 14. An apparatus for seeding a random number generator, the
2 apparatus comprising:

3 (a) means for retrieving a first data block from a memory;

4 (b) means for initially seeding the random number generator
5 using said first data block as a seed;

6 (c) means for retrieving a number generated by the random
7 number generator;

8 (d) means for mapping said number to a memory address in
9 said memory using a mathematical function;

10 (e) means for retrieving a successive data block from said
11 memory address; and

12 (f) means for successively seeding the random number
13 generator with a combination of said seed and said successive data block such
14 that said combination of said seed and said successive data block becomes a
15 resulting seed.

1 15. The apparatus recited in claim 14, further comprising:

2 (e') means for testing for satisfaction of at least one criterion
3 after each use of said means for said retrieving said successive data block of
4 (e), and if said at least one criterion is not satisfied, repeating (c), (d), (e), and
5 (e').

1 16. The apparatus recited in claim 15, further comprising:

2 (e'') means for checking the number of repetitions of (c), (d),
3 (e), and (e') due to failure to satisfy said at least one criterion after each use of
4 said means for said testing and repeating of (e'), and stopping said repeating
5 when a specified number of said repetitions have been performed.

1 17. A computer-readable medium having computer-readable
2 instructions for performing a method of accessing a database of interest, the
3 method comprising the steps of:

4 (a) retrieving a first data block from a memory;

5 (b) initially seeding the random number generator using said
6 first data block as a seed;

7 (c) retrieving a number generated by the random number
8 generator;

9 (d) mapping said number to a memory address in said
10 memory using a mathematical function;

11 (e) retrieving a successive data block from said memory
12 address; and

13 (f) successively seeding the random number generator with a
14 combination of said seed and said successive data block such that said
15 combination of said seed and said successive data block becomes a resulting
16 seed.

1 18. The computer-readable medium recited in claim 17,
2 wherein said method further comprises the further step of:

3 (e') after each performance of (e), testing for satisfaction of at

4 least one criterion and if said at least one criterion is not satisfied, repeating (c),
5 (d), (e), and (e').

1 19. The computer-readable medium recited in claim 18,
2 wherein said method further comprises the further step of:

3 (e'') after each performance of (e'), checking the number of
4 repetitions of (c), (d), (e), and (e') due to failure to satisfy said at least one
5 criterion and stopping said repetitions when a specified number of said
6 repetitions have been performed.